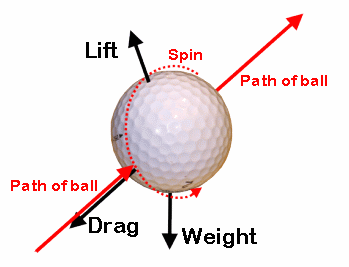
Projectile Motion in Every Day Life

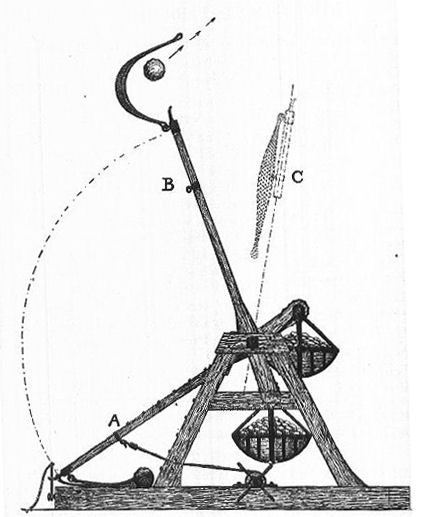
1. Golf Shot- The initial velocity of the launch is dependent upon the club head speed of the golf swing. Launch angle is dependent upon the club selection and stance of the golfer.



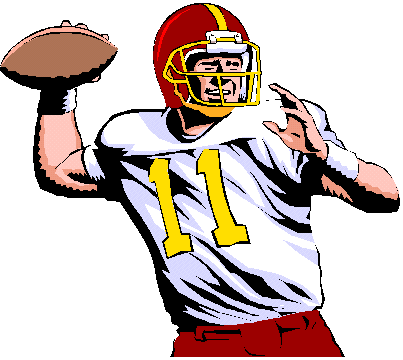
1. Basketball Shot- The right combination of angle and force applied to the ball enables it to go into the basket.



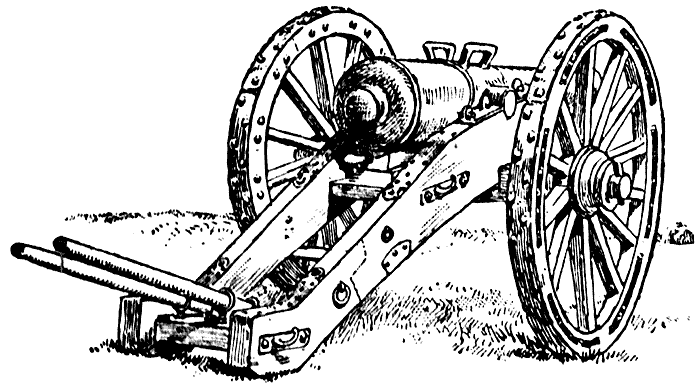
1. Trebuchet Launch- A launch angle of around 38 degrees will achieve the maximum distance.



1. Football Throw- The ball is not a typical sphere, but that of a somewhat pointed ellipse. This makes the ball more aerodynamic, enabling it to cut through the wind.



1. Cannon Launch- Cannons blast their balls with a large magnitude of initial velocity. The heavy metal ball carries a lot of momentum and destroys all in its path.



1. Bow and Arrow- The arrow is launched by the bow with initial velocity. The velocity of the arrow on impact determines how far the arrow will penetrate the target.



1. Baseball Throw- When a major league pitcher winds up, he could potentially throw the ball in excess of 100 mph. In terms of seconds, that is 147 ft per second. If the pitcher is 60 ft from the batter, and he throws 147 ft per second, the batter has less than half of a second to place the bat on the ball.



1. Gun Shot- Guns explode in the chamber, causing pressure and heat to propel a bullet out of the other end. Because of the large initial velocity, the flight of the bullet is horizontal initially, and then drops off at the end.



1. Sky Diving- Objects in freefall undergo the same forces of gravity that launched projectiles go through. When sky diving, a human can travel up to 200 MPH when diving towards the Earth.



1. Anything that falls- As long as an object is not being supported by anything, the object will undergo the force of gravity, -9.8 meters per second per second.

